BRUHAT BANGALORE MAHANAGARA PALIKE

RAJARAJESHWARINAGAR ZONE

ELECTRICAL DIVISION

DETAILED ESTIMATE FOR PUBLIC WORKS

Name of the Work:- Providing Electrical Maintenance and repairs to Park lightings and other installation in ward No-17 (JP Park) of RR Nagar zone

Est No-AEE/ELE/RRN/EST.NO/ /2020-21						Est.Cost:-Rs 6,00,000/-	
Sl No	SR ref		Description of Work	unit	Qty	Rate	Amount
	page	sl no					
1		1	Providing services of Clerk/computer operator/Dataentry operator/Tax collector/Electrician and other Skilled Workers.Skilled Electrician.(For 6 Months) Dept of labour No KAE 71 LWA 2015 Dtd:04/08/2016.	Per person per Month	1	13365.00	80190.00
2	5	2.3.2	Wiring for lighting/power circuit using one of **FRLS** PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments. 1.5 sqmm	Mtr.	300	20.50	6150.00
2a	6	2.3.3	2.5 sqmm	Mtr.	200	32.00	6400.00
2b	6	2.3.4	4 sqmm	Mtr.	180	45.00	8100.00
2c	6	2.3.3	6 sqmm	Mtr.	150	70.00	10500.00
4	27	5.17.5	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 20 Amps SP	Each	8	1336.00	10688.00
4a	27	5.17.2	40 Amps SP	Each	8	713.00	5704.00
4b	27	5.17.9	50-63Amps TPN	Each	4	2397.00	9588.00
5	26	5.13.3	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947 100 Amps	Each	6	4200.00	25200.00
6	32	5.47	Supplying and fixing Microprocessor based Electronic timer (without contactor, Din Mounting using necessary bolts, nuts and washers etc.,) **3-120sec** setting.	Each	6	1925.00	11550.00
7	40	6.4.2	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm	Mtr	200	130.00	26000.00
7a	40	6.4.5	3.5 core 25 sqmm	Mtr	100	180.00	18000.00
7b	40	6.4.6	3.5 core 35 sqmm	Mtr	100	225.00	22500.00
8	41	6.5.1	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. In existing trench/duct. 6 sqmm to 16 sqmm	Mtr	250	11.88	2970.00
8a	41	6.5.2	25 sqmm to 75 sqmm	Mtr	200	15.50	3100.00

Sl No	SR ref page	SR ref sl no	Description of Work	unit	Qty	Rate	Amount
9	41	6.6.1	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) In soil (ordinary)	Mtr	300	76.00	22800.00
10	43	6.17.5	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes. 16 sqmm	Each	35	12.44	435.40
10a	43	6.17.7	25 sqmm Long Barrel	Each	20	20.00	400.00
10b	43	6.17.8	35 sqmm Long Barrel	Each	20	32.00	640.00
11	25	5.7.2	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers. 32 Amps	Each	6	174.00	1044.00
11a	25	5.7.3	63 Amps	Each	6	227.00	1362.00
11b	25	5.7.4	100 Amps	Each	5	349.00	1745.00
12	31	5.43.1	Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop- Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/ Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets. 200mmx200mmx98mm	Each	10	1917.00	19170.00
13	67	41154	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified Agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark/name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect, working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source. LED Streetlight 25watts	No	24	1840.00	44160.00

Administrative Sanction for Rs. 6050000.00 is accorded
Rs. Six lakhs only 20.08.18
under the ... d...
By EE (Elect) RRN page No 40841
Registered as EE (Elect)RRN/No 04/2021 Subject to conditions contained in enclosed memo
No. 04/2021 Date. 24/12/2020

Sl No	SR ref page	SR ref sl no	Description of Work	unit	Qty	Rate	Amount
14	76	13.52.1	Supplying & fixing LED Drivers suitable for 5700K LED fitting Outdoor Fixtures. Operating voltage range from 180V to 265V, 50Hz AC power Supply a) 25W 5700K suitable for outdoor LED fitting.	Each	100	1198.00	119800.00
14a	76	13.52.2	40W 5700K suitable for outdoor LED fitting.	Each	18	1700.00	30600.00
15	73	13.20	Supplying and fixing of T8 36/40W Fluorescent Tube with 36W power consumption with initial lumen of 2750 (3000 deg K / 4000 deg K) with rated avg life of greater than 10000 hrs. Operating voltage range from 180V to 265V, 50Hz AC power Supply	No	8	53.00	424.00
15a	73	13.22.2	Supplying and fixing of Electronic Ballast suitable for T8 Lamp with housing made of Pre-coated steel/PC, Operating voltage range from 180V to 265V, 50Hz AC power Supply flicker free warm start with over voltage protection, Inrush current protection, De-activated lamp protection & End of Lamp life protection with PF> 0.95 & TC(deg C) > 65 degC. Operating voltage range from 180V to 265V, 50Hz AC power Supply. 1x36/40 watts	Each	8	375.00	3000.00
16	10	3.6.1	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293. 6 Amps one way switch	Each	8	70.00	560.00
16a	10	3.6.10	32Amps DP switch	Each	10	182.00	1820.00
17	26	5.14.1	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, ferrule and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) 100 Amps 25kA	Each	4	4530.00	18120.00
			Sub Total				512720.40
			Add GST @ 12%				61526.45
			Add tender Premium @ 5%				25636.02
			Miscellanious and Roundoff	**L/S**			117.13
			TOTAL				600000.00

Technically Sanctioned for Rs. Six lakhs only is accorded under the head PA0298 By EE (Elect) RRN/ Page 39/33 Registered as R.R.N. No. 02/20-21 to conditions contained in enclosed memo No. 02/20-21 Date. 28/12/2020

AE, (Elect) RRN

EE (Elect) RRN

Certificate

1) Certified that,the work spot has been inspected by me & prepared the estimate in most economical way of executing the work.

2) The Provisions made in the estimate are adequate and are necessary.

3) The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.

4) The rates in the Estimate is based on the KPWD (Elect) SR 2019-20

Junior Engineer(Electrical)
RR Nagar Zone
BBMP

Assistant Executive Engineer (Elect)
RR Nagar Zone
BBMP

Executive Engineer (Elect)
RR Nagar Zone
BBMP